

Listing of Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

1. (Previously Presented) A method for delivering an Application Service Provider (ASP) service to a wireless device in a personal area network (PAN), the method comprising:

providing an ASP delivery system connected to a computer communications network over a physical communications link and connected to the PAN via a short-range radio frequency communications link, said ASP delivery system being configured to deliver components of ASP services over the short-range radio communications link to the wireless device in the PAN, said ASP delivery system also being configured to store some components of ASP services locally and to retrieve at least a portion of said components of said ASP services from ASPs in said computer communications network over said physical communications link when necessary, wherein said components of said ASP services comprise a plurality of different software programs from among which a user of the wireless device selects and interacts with via the short-range radio communications link;

detecting a presence of the wireless device in the PAN by the ASP delivery system;

establishing a short-range radio communications link with the wireless device in said PAN and verifying subscription of or offering subscription to the wireless device;

transmitting to said wireless device over the established short-range radio communications link a list of ASP services available in the ASP delivery system or retrievable from ASPs in the computer communications network;

receiving from said wireless device requests for at least one of said ASP services selected from said list of ASP services;

for each component of said selected ASP services, determining if said ASP delivery system can immediately deliver said component without requiring retrieval of said component from ASPs and immediately delivering said component to said wireless device if retrieval of said component is not required; and,

if said ASP delivery system cannot deliver said component without requiring retrieval of said component from ASPs, retrieving said component for said at least one ASP service from one of said ASPs over said physical communications link.

2. (Original) The method of claim 1, wherein said step of establishing a short-range radio communications link with said wireless device in said PAN comprises:

establishing a BLUETOOTH-based communications link with said wireless device.

3. (Original) The method of claim 1, wherein said step of establishing a short-range radio communications link with said wireless device in said PAN comprises:

establishing an IEEE 802.11b based communications link with said wireless device.

4. (Original) The method of claim 1, wherein said step of establishing a short-range radio communications link with said wireless device in said PAN comprises:

establishing an IEEE 802.11a based communications link with said wireless device.

5. (Previously Presented) A system for delivering an Application Service Provider (ASP) service to a wireless device in a personal area network (PAN), the system comprising:

an ASP delivery system connected to a computer communications network over a physical communications link and connected to the PAN via a short-range radio frequency communications link, said ASP delivery system being configured to deliver components of ASP services over the short-range radio communications link to the wireless device in the PAN, said ASP delivery system also being configured to store some components of ASP services locally and to retrieve at least a portion of said components of said ASP services from ASPs in said computer communications network over said physical communications link when necessary, wherein said components of said ASP services comprise a plurality of different software programs from among which a user of the wireless device selects and interacts with via the short-range radio communications link;

means for detecting a presence of the wireless device in the PAN by the ASP delivery system;

means for establishing a short-range radio communications link with the wireless device in said PAN and verifying subscription of or offering subscription to the wireless device;

means for transmitting to said wireless device over the established short-range radio communications link a list of ASP services available in the ASP delivery system or retrievable from ASPs in the computer communications network;

means for receiving from said wireless device requests for at least one of said ASP services selected from said list of ASP services; and

means for determining, for each component of said selected ASP services, if said ASP delivery system can immediately deliver said component without requiring retrieval of said component from ASPs and immediately delivering said component to said wireless device if retrieval of said component is not required, if said ASP delivery system cannot deliver said component without requiring retrieval of said component from ASPs, retrieving said component for said at least one ASP service from one of said ASPs over said physical communications link.

6. (Previously Presented) The system of claim 5, wherein said short-range radio communications

link is configured in accordance with BLUETOOTH specifications.

7. (Previously Presented) The system of claim 5, wherein said short-range radio communications

link is configured in accordance with IEEE 802.11a.

8. (Previously Presented) The system of claim 5, wherein said short-range radio communications

link is configured in accordance with IEEE 802.11b.

9. (Previously Presented) A computer-readable storage medium having stored thereon a computer program for delivering components for Application Service Provider (ASP) services to a wireless device in a personal area network (PAN), said computer program comprising a routine set of instructions for performing the steps of:

providing an ASP delivery system connected to a computer communications network over a physical communications link and connected to the PAN via a short-range radio frequency communications link, said ASP delivery system being configured to deliver components of ASP services over the short-range radio communications link to the wireless device in the PAN, said ASP delivery system also being configured to store some components of ASP services locally and to retrieve at least a portion of said components of said ASP services from ASPs in said computer communications network over said physical communications link when necessary, wherein said components of said ASP services comprise a plurality of different software programs from among which a user of the wireless device selects and interacts with via the short-range radio communications link;

detecting a presence of the wireless device in the PAN by the ASP delivery system;

establishing a short-range radio communications link between the ASP delivery system and the wireless device in the PAN and verifying subscription of or offering subscription to the wireless device;

transmitting from said ASP delivery system to said wireless device over said established short-range radio communications link a list of ASP services from among

which a user of said wireless device selects at least one to receive over said short-range radio communications link;

receiving requests for selected ASP services at said ASP delivery system from said wireless device;

for each component of said selected ASP services, determining if said ASP delivery system can deliver said component of said requested ASP services without requiring retrieval of said component from an external ASP and immediately forwarding said component to said wireless device in said PAN over said established short-range radio communications link if retrieval of said component from said external ASP is not required; and,

if said component of said requested ASP services cannot be provided by said ASP delivery system without requiring retrieval of said component from said external ASP, retrieving said component from said external ASP and forwarding said retrieved component to said wireless device in said PAN over said established short-range radio communications link.

10. (Previously Presented) The computer-readable storage medium of claim 9, wherein said step of establishing a short-range radio communications link with said wireless device in said PAN comprises:

establishing a BLUETOOTH-based communications link with said wireless device.

11. (Previously Presented) The computer-readable storage medium of claim 9, wherein said step of establishing a short-range radio communications link with said wireless device in said PAN comprises:

establishing an IEEE 802.11b based communications link with said wireless device.

12. (Previously Presented) The computer-readable storage medium of claim 9, wherein said step of establishing a short-range radio communications link with said wireless device in said PAN comprises:

establishing an IEEE 802.11a based communications link with said wireless device.

13. (Previously Presented) An Application Service Provider (ASP) service delivery method, comprising:

providing a short-range radio frequency communications system, said system having an ASP delivery system connected to a computer communications network over a physical communications link, said ASP delivery system being configured to deliver components of ASP services over a short-range radio communications link to a wireless device in a personal area network (PAN), said ASP delivery system also being configured to store some components of ASP services locally and to retrieve over said physical communications link at least a portion of said components for available ASP services from ASPs in said computer communications network, wherein said components of said available ASP services comprise a plurality of different software programs from among which a user of the wireless device can select at least one;

establishing the short-range radio communications link with the wireless device in said PAN;

transmitting a list of said available ASP services from said ASP delivery system to said wireless device the short-range radio communications link;

said wireless device requesting to said ASP delivery system at least one available ASP service listed among the list of said available ASP services;

for each component of said at least one requested ASP service, determining if said ASP delivery system can provide said component for said requested at least one ASP service without requiring retrieval of said component from said ASPs and immediately forwarding to said wireless device said component if retrieval of said component from said ASPs is not required; and,

if said ASP delivery system cannot forward said requested at least one ASP service without requiring retrieval of said component from said ASPs, retrieving said component from said ASPs over said physical communications link and forwarding said retrieved component to said wireless device in said PAN over said short-range radio communications link.

14. (Previously Presented) The method of Claim 13, wherein said list of Available ASP services is transmitted to said wireless device in response to a query transmitted by said wireless device.

15. (Previously Presented) The method of Claim 13, wherein said list of Available ASP services is transmitted to said wireless device automatically from said Available ASPs in response to detecting a presence of said wireless device within said PAN.

16. (Previously Presented) The method of Claim 13, further comprising determining whether said wireless device is a valid subscriber of said Available ASPs services.

17. (Previously Presented) The method of Claim 16, further comprising prompting said wireless device to register with the Available ASPs if said wireless device is not a valid subscriber.

18. (Previously Presented) The method of Claim 13, wherein the list of available services is determined based upon at least one of prioritization, transaction statistics, resources of said wireless device, and resources of said communications system.

19. (Previously Presented) The method of Claim 1, wherein each of the different software programs is configured to be executed by said wireless device.

20. (Previously Presented) The method of Claim 13, wherein each of the different software programs is configured to be executed by said wireless device.